

Numerous federal regulatory bodies have adopted a view of potential competition similar to that used in the antitrust area. The Board of Governors of the Federal Reserve System has jurisdiction, along with the Department of Justice, to investigate possible anticompetitive effects from mergers and acquisitions involving Federal Reserve System member banks or bank holding companies. As described in a recent statement to Congress, among the factors the Board considers is "the importance of potential competition, both in terms of the likelihood of new entry into the market and the current competitive effect from the threat of entry."⁷

The Interstate Commerce Commission (ICC) is permitted to exempt from regulation those rail transactions and services "where it finds that existing or potential competition is sufficient to deter railroads from abusing their market position."⁸ Elaborating in other decisions on the role of potential competition, the ICC has written:

However, our market dominance analysis is not limited to what happened as of a particular date, but also considers what could have happened; that is, we look not only at actual or historic competition but also consider potential competition as a restraining factor on a carrier's pricing discretion.⁹

⁷ Statement by Edward C. Ettin, Deputy Director, Division of Research and Statistics, Board of Governors of the Federal Reserve System, before the Subcommittee on Treasury, Postal Service, and General Government of the Committee on Appropriations, U.S. Senate, February 24, 1992, *Federal Reserve Bulletin*, April 1992, pp. 262-3. See also Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Subcommittee on Monopolies and Commercial Law of the Committee on the Judiciary, U.S. House of Representatives, September 14, 1988, *Federal Reserve Bulletin*, November 1988, p. 748.

⁸ Rail General Exemption Authority—Miscellaneous Manufactured Commodities, 1988 ICC Lexis 69, at *8 (ICC, January 29, 1988).

⁹ *Amstar Corporation v. The Alabama Great Southern Railroad, et al.*, 1988 ICC Lexis 147, at *3, (ICC, May 10, 1988).

Actual use of a transportation alternative is not a prerequisite to the existence of effective competitive pressure. Such pressure can and does rise from potential competition.¹⁰

Potential competition is also examined by the Federal Energy Regulatory Commission (FERC). In a recent case, FERC was asked to consider tariffs filed for pipeline movements of several petroleum products. In its evaluation of market power issues, FERC included the consideration of potential competition.

...[P]otential competition is properly weighed in the requisite analysis of market power....This potential is especially appropriate in an industry where entry is unregulated, and...several entrants have built new lines or refurbished old ones....Any analysis of the competitiveness of a market deals inevitably with potential.¹¹

Cable competitors

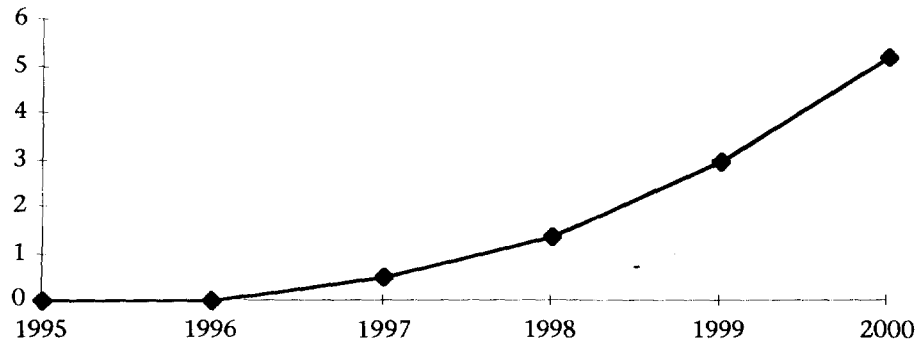
For cable operators, there are several sources of actual and potential competition, including MMDS, DBS and VDT.¹² DBS is now available everywhere in the United States having a small but rapidly growing market share, and MMDS systems are already present in many metropolitan areas. Some pilot VDT projects are imminent, and it appears that all or most current restrictions on telephone company provision of multichannel video services may soon disappear. VDT systems are projected to attract significant numbers of subscribers starting in 1997 and grow rapidly after that point.

¹⁰ Increased Rates on Coal, L&N RR, 1990 ICC Lexis 130, at *18-19, (ICC, April 17, 1990).

¹¹ Williams Pipe Line Company; Enron Liquids Pipeline Company, 58 F.E.R.C. P63,0004; 1992 FERC Lexis 157, at *6, *57-59 (FERC, January 24, 1992).

¹² This list conforms to the Commission's definition of the relevant market, which excludes over-the-air broadcast stations and video rental and sales outlets. To exclude such active current competitors makes this market definition arbitrary, and nothing here should be taken to imply agreement with the Commission's definition.

Projected telco switched digital services subscribers
(in millions of households)



Source: see appendix

The economics of high-powered direct broadcast satellite services such as DirecTv, USSB, and PrimeStar make them formidable competitors to cable. The availability of the service in any given franchise area at a very low marginal cost imposes competitive discipline on a cable operator. The actual penetration of DBS in any given local area is a poor indication of its competitive impact on rates. While DBS services may or may not discriminate in price according to territory, they certainly can focus marketing efforts regionally and locally in response to opportunities created by high-priced or inadequate cable service. Local DBS customer equipment sellers and installers will be particularly sensitive to such conditions. The prospects for competitive success of DBS have been heightened by the Commission's policy of encouraging cable operators to offer low-price "lifeline" basic service.¹³ Such service focuses attention on the fact that DBS competes most directly with the "cable program service" tier.

Cable operators within the coverage area of an existing MMDS service similarly face actual or potential competition that is out of proportion to the current market share of the MMDS service. Put differently, the proper measure of the competitive significance of the MMDS service is its capacity to serve customers rather than its actual subscriber count. If a cable operator raises its prices, the number of MMDS

¹³ See *Social Contract for Continental Cablevision, Inc.*, April 3, 1995, at 9.

subscribers can increase at a very low incremental cost to the MMDS operator. Thus, the mere existence of an MMDS operator, combined with over the air broadcasters, with coverage of a cable franchise area may impose significant competitive discipline.

Of course, the mere existence of low shares for DBS and MMDS does not establish them as potential competitors to cable. Cable operators will only be restrained by potential competition if they believe that these alternative video delivery systems could expand their sales sufficiently to make an unwarranted price increase unprofitable. An excellent recent example of vigorous competition between cable and MMDS occurred in Mexico City, as detailed in the accompanying paper. An MMDS operator entered the local market after a sustained period of high prices and relatively low quality offerings by the local cable operator. In the ensuing competition, the local cable operator reduced real monthly service rates by over a third between 1988 and 1994, and still saw its market share fall from 98 percent to 34 percent. Consumers demonstrated that they were quite willing to switch from cable to MMDS.

In order for MMDS or DBS to be an effective constraint on cable pricing, it is not necessary that *all* cable subscribers be willing to switch to one of these alternative services if cable prices increase or cable service deteriorates. It is only necessary that a sufficient number of existing subscribers be willing to switch to make such a change in price or service unprofitable.

Growing significance of MMDS

Unlike DBS, MMDS has been available to consumers for over 10 years. In that time it has attracted relatively low numbers of subscribers. However, two developments are expected to increase MMDS penetration significantly in the near future. First, digital compression technology will make it possible for MMDS systems to offer subscribers many more channels than in the past. Second, several Regional Bell Operating Companies (RBOCs) have made substantial investments in MMDS operations, giving a boost not only to those operations but to MMDS as a whole.

Until recently, a typical MMDS system has been unable to offer subscribers more than around 30 channels.¹⁴ This limitation has tended to put MMDS at a disadvantage in competing with cable systems. However, technology is now being tested that will permit MMDS operators to provide 100 or more channels. Digital compression at ratios of 3:1 up to 10:1 is expected in the next year or so.¹⁵ These developments will allow MMDS operators to offer a full range of video services competitive with the basic, premium and pay-per-view video services offered by cable systems.

Several significant players have entered MMDS in the past few months. First, Bell Atlantic and NYNEX agreed to invest \$100 million in CAI, an MMDS operator based in Rochester, NY.¹⁶ When combined, the MMDS systems CAI owns and is acquiring will have access to about 12.8 million homes.¹⁷ Bell Atlantic and NYNEX expect to be involved in billing and other customer contacts for CAI operations in their respective telephone service areas. Second, Pacific Telesis acquired an MMDS operator in California in a \$125 million stock swap.¹⁸ It expects to offer service to 5 million households including Riverside, San Diego and Los Angeles by the end of 1996.

¹⁴ "Bell Atlantic Considering Wireless Solution to Broadband Business Needs," *Fiber Optics News*, May 22, 1995, vol. 15, issue 20.

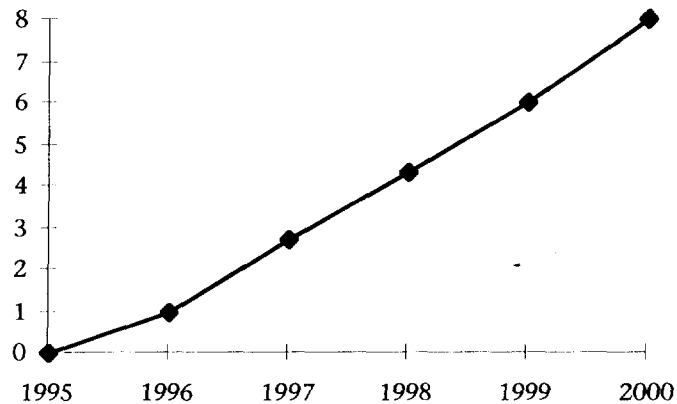
¹⁵ "Wireless Results Positive," *Television Digest*, March 13, 1995; and "A Telco Vision: Upscale Wireless," *Wireless Cable Investor*, May 31, 1995.

¹⁶ "RBOCs Pump \$100 Million into Wireless Cable Firm, Spurring Consolidation," *Communications Daily*, March 30, 1995; and Michael Farrell, "Phone companies back CAI's expansion plans," *Capital District Business Review*, April 3, 1995, p. 1.

¹⁷ Michael Dresser, "Bell Atlantic to provide 'wireless cable' by '96," *The Baltimore Sun*, March 30, 1995, p. 1A.

¹⁸ Wendy Tanaka, "PacTel plans to buy into wireless video," *San Francisco Examiner*, April 18, 1995, p. B-1.

Projected telco MMDS subscribers
(in millions of households)



Source: see appendix

The participation of these three firms in MMDS is even more significant because of their growing involvement in video programming. Bell Atlantic, NYNEX and Pacific Telesis have formed a joint venture called TELE-TV to develop original video programming, employing some of the best talent in the industry.¹⁹ Offering this programming on MMDS systems may increase their consumer appeal relative to cable systems.

Telco MMDS subscribers, coupled with subscribers to SMATV and non-telco MMDS systems, now stand at an estimated 1.7 million. Total subscribers are projected to increase to 8.7 million by 2000.

DBS's competitive impact

In its first year, sales of the Digital Satellite System (DSS) unit have eclipsed initial sales of every other consumer electronics product ever launched.²⁰ Nearly 1 million of the DSS systems have been sold to customers since last June. That compares with 120,000 VCRs sold the first year VHS recorders were available or 115,000 big-screen

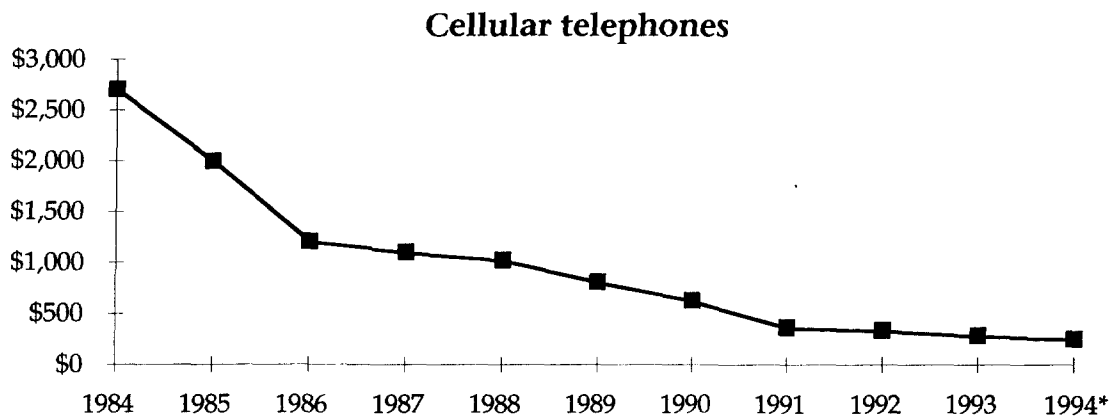
¹⁹ "A Telco Vision: Upscale Wireless," *Wireless Cable Investor*, May 31, 1995.

²⁰ "DirecTv beams new play," *Denver Post*, June 2, 1995.

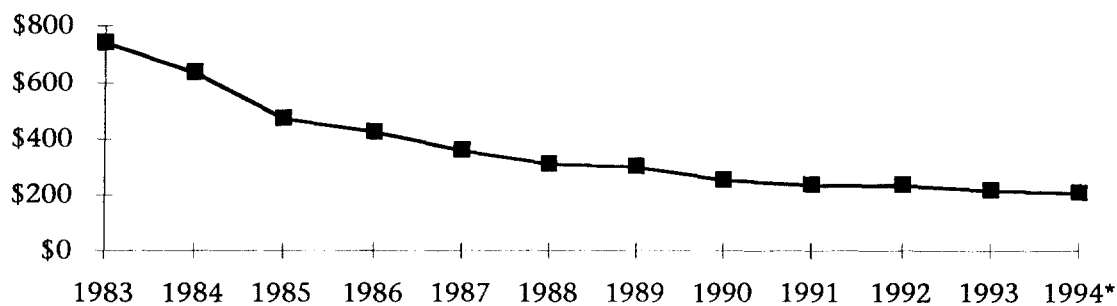
TVs in the first year they were available. While the DSS equipment has been sold under the RCA brand name exclusively for the past year, in June 1995 Sony electronics rolled out its version of the same electronics, and other manufacturers, including Toshiba, are expected to begin making the systems in 1996.

The adoption of DSS technology is all the more remarkable given the size of the required initial expenditure on a satellite dish and set-top decoder (\$700 or more). As with many emerging technologies, small initial production volume and newness combine to produce higher costs relative to those the industry can later achieve. With the emergence of additional suppliers and a maturing of the manufacturing process, prices of customer premises equipment will surely decline, just as they have with virtually every consumer electronics product.

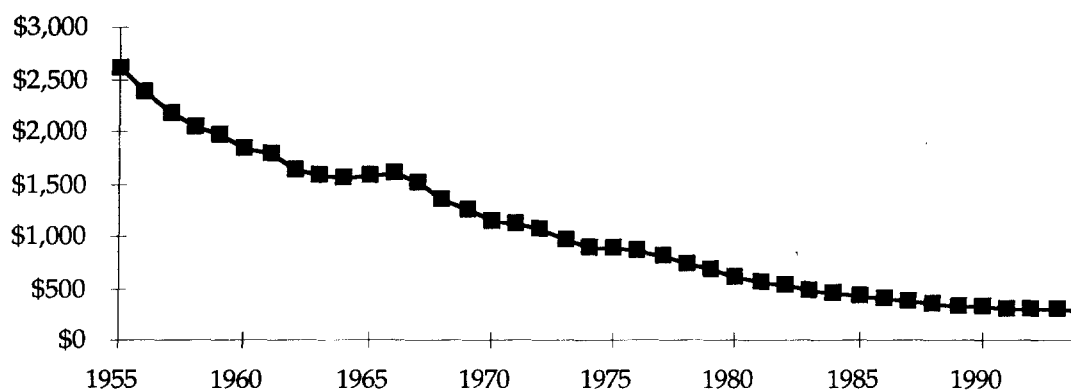
Three examples of falling prices—cellular telephones, VCRs, and color televisions—are illustrated in the charts that follow (see appendix for sources).



Videocassette recorders



Direct-view color TV receivers



Direct satellite services such as DirecTv, USSB and PrimeStar are expected to aggressively step up their efforts to attract subscribers.²¹ One market forecast projects that 1 million cable subscribers will switch to a direct satellite system provider this year.²² The president of DirecTv reports that over 60 percent of

²¹ "Cable faces renewed satellite competition," *Broadcasting & Cable*, June 12, 1995, at 29.

²² *Id.*

DirecTv's existing subscribers are former cable subscribers.²³ Competition among DBS providers themselves is also likely to lead to lower DBS prices. EchoStar and AlphaStar Television are expected shortly.²⁴ Satellite services will do best picking up cable subscribers when they compete against cable systems that provide sub-par programming or service or have excessive rates.

Because of their high fixed cost and low marginal costs, DBS providers will want to charge very low prices to consumers in order to spread their fixed costs and enjoy economies of scale. The relatively high prices charged at the introductory stage attract high-value users—so-called “early adopters.” In order to expand their subscriber base, DBS providers will find ways to price discriminate, perhaps through equipment bundling.

Currently, DirecTv is beginning to offer a financing package through certain dealers enabling customers to buy the DSS equipment and receive DirecTv programming for less than \$30 per month. By offering both the system and the programming for about a dollar a day, DirecTv will compete with PrimeStar, which currently leases customer receiving equipment, and potentially open up a new stream of customers. DirecTv will finance the cost of the equipment (including installation) and one of DirecTv's packages of programs for about \$26 a month for the first year. The programming offered is DirecTv's \$29.95-a-month Total Choice package.²⁵

A similar marketing strategy was followed by cellular phone service providers. Initially, users of this technology purchased their phones at high prices and paid

²³ Id.

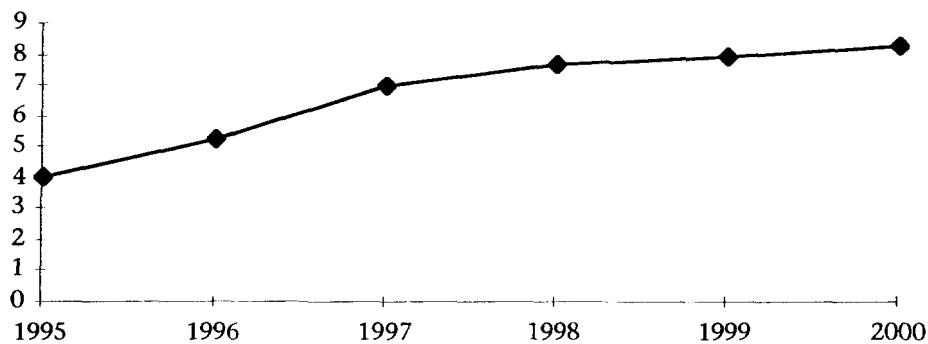
²⁴ See, e.g., “Cable competitors are taking direct approach: Two new DTH systems poised to complicate competitive picture,” *Broadcasting & Cable*, May 15, 1995, at 30, and “Mixed prophecy for satellite: DBS business to expand, C-Band may recede,” *Communications Daily*, March 17, 1995, at 4. Tentative pricing for EchoStar's system is below that for DirecTv. See, “EchoStar Files \$80M Stock Offering to Fund DBS,” *Multichannel News*, May, 15, 1995, at 85.

²⁵ “DirecTv beams new ploy,” *Denver Post*, June 2, 1995.

high monthly service rates. Over time, service providers subsidized the purchase of the phones, to the point of giving them away, when a new customer signed up for a year's worth of service. In addition, the price of cellular service has fallen.

Falling prices for DBS hardware and programming services are expected to contribute to a rapid growth in subscribers. Recent conservative estimates are shown below. Other estimates put DBS subscribers at 10 million or more by the year 2000.²⁶

Projected satellite subscribers
(millions of households)



Includes C-band. Source: see appendix

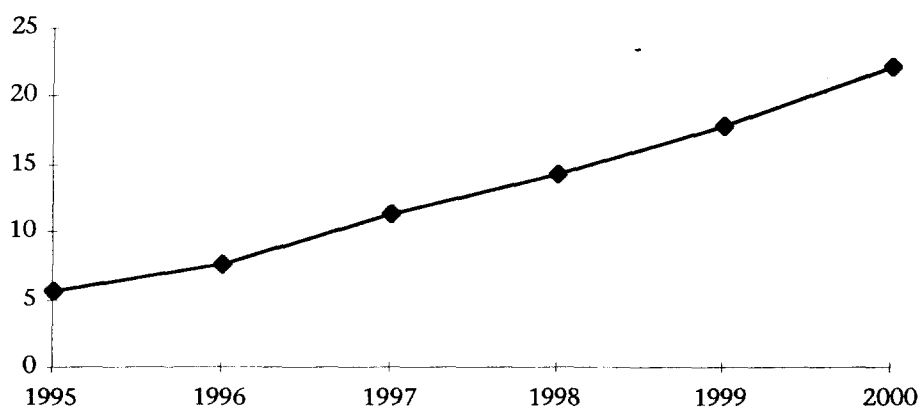
Conclusion

It is well recognized in economic theory and practice that not only current major competitors but also competitors with small market shares having substantial capacity and potential competitors are important in disciplining the behavior of firms. Federal courts, antitrust agencies and numerous regulatory agencies acknowledge that in assessing the degree of competition in a market, one must frequently look beyond the number and size of firms currently offering substitute products to consider potential sources of substitute products. Similarly, in measuring market shares in industries where output can expand rapidly, it is

²⁶ See, e.g., "Between the Lines," *Cablevision*, November 14, 1994, p. 6.

capacity rather than current sales that counts. Indeed, the aggregate share of alternative multichannel video services is projected to grow quickly in any event. The chart below shows the combined projected subscribers for DBS, all MMDS, and VDT. The chart excludes advanced TV digital broadcast services.

Non-cable multichannel video subscribers, projected
(in millions of households)



Source: see appendix

What is important is not that all cable subscribers would find these alternative services suitable in the event that cable operators increased price, but that a sufficient number of cable subscribers would substitute one of these alternatives in the face of a cable rate increase so as to make the rate increase unprofitable, and that the cable operator cannot price discriminate in favor of these customers.

APPENDIX

E C O N O M I S T S I N C O R P O R A T E D

Projected Subscribers to Non-Cable Multichannel Video Services

	1995	1996	1997	1998	1999	2000
MMDS*	1.7	2.4	3.9	5.2	6.9	8.7
SDV**	0	0	0.5	1.4	3	5.2
DBS†	4.1	5.3	7	7.7	8	8.3
TOTAL	5.8	7.7	11.4	14.3	17.9	22.2

Source: Paul Kagan Associates, Cable TV Investor, May 31, 1995, p.6

* Includes SMATV and non-telco MMDS

** Telco-supplied switched digital video

† Includes high power, medium power, and C-band services

Cellular Telephones -Factory Sales-

	Quantity (Thousands)	Value (Millions)	Average Nominal Price	CPI	Average Real Price (In 1992 Dollars)
1984	25	50	\$2,000	0.741	\$2,701
1985	75	115	\$1,533	0.767	\$1,999
1986	280	266	\$950	0.781	\$1,216
1987	300	267	\$890	0.810	\$1,099
1988	500	430	\$860	0.843	\$1,020
1989	870	635	\$730	0.884	\$826
1990	1,888	1,133	\$600	0.932	\$644
1991	2,788	962	\$345	0.971	\$355
1992	3,371	1,146	\$340	1.000	\$340
1993	4,218	1,257	\$298	1.030	\$289
1994*	4,760	1,275	\$268	1.061	\$252

* Estimated

Source: Electronic Industries Association, Economic Report of the President

Videocassette Recorders

–U.S. Sales–

	Quantity (Thousands)	Value (Millions)	Average Nominal Price	CPI	Average Real Price (In 1992 Dollars)
1983	4,091	\$2,162	\$528	0.710	\$744
1984	7,616	\$3,585	\$471	0.741	\$636
1985	11,336	\$4,173	\$368	0.767	\$480
1986	12,005	\$3,978	\$331	0.781	\$424
1987	11,702	\$3,442	\$294	0.810	\$363
1988	10,748	\$2,848	\$265	0.843	\$314
1989	9,760	\$2,625	\$269	0.884	\$304
1990	10,119	\$2,439	\$241	0.932	\$259
1991	10,718	\$2,454	\$229	0.971	\$236
1992	12,329	\$2,947	\$239	1.000	\$239
1993	12,448	\$2,851	\$229	1.030	\$222
1994*	13,000	\$2,860	\$220	1.061	\$207

* Estimate

Source: Electronic Industries Association, Economic Report of the President

Direct-View Color TV Receivers

-U.S. Sales to Dealers-

	Quantity (Thousands)	Value (Thousands)	Average Nominal Price	CPI	Average Real Price (In 1992 Dollars)
1955	20	\$10,000	\$500	0.191	\$2,618
1956	100	\$46,000	\$460	0.194	\$2,373
1957	85	\$37,000	\$435	0.200	\$2,173
1958	80	\$34,000	\$425	0.206	\$2,063
1959	90	\$37,000	\$411	0.207	\$1,982
1960	120	\$47,000	\$392	0.211	\$1,856
1961	147	\$56,000	\$381	0.213	\$1,788
1962	438	\$154,000	\$352	0.215	\$1,633
1963	747	\$258,000	\$345	0.218	\$1,584
1964	1,404	\$488,000	\$348	0.221	\$1,573
1965	2,694	\$959,000	\$356	0.225	\$1,586
1966	5,012	\$1,861,000	\$371	0.231	\$1,608
1967	5,563	\$2,015,000	\$362	0.238	\$1,522
1968	6,215	\$2,086,000	\$336	0.248	\$1,353
1969	6,191	\$2,031,000	\$328	0.262	\$1,254
1970	5,320	\$1,684,000	\$317	0.277	\$1,145
1971	7,274	\$2,355,000	\$324	0.289	\$1,122
1972	8,845	\$2,825,000	\$319	0.298	\$1,072
1973	10,071	\$3,097,000	\$308	0.316	\$972
1974	8,411	\$2,658,000	\$316	0.351	\$899
1975	6,485	\$2,211,547	\$341	0.383	\$889
1976	7,700	\$2,687,740	\$349	0.406	\$861
1977	9,107	\$3,187,398	\$350	0.432	\$810
1978	10,236	\$3,582,814	\$350	0.465	\$753
1979	9,846	\$3,544,717	\$360	0.517	\$696
1980	10,897	\$4,003,548	\$367	0.587	\$626
1981	11,157	\$4,123,312	\$370	0.648	\$570
1982	11,366	\$4,141,098	\$364	0.688	\$530
1983	13,986	\$4,885,930	\$349	0.710	\$492
1984	16,083	\$5,358,768	\$333	0.741	\$450
1985	16,995	\$5,521,880	\$325	0.767	\$424
1986	18,204	\$5,835,924	\$321	0.781	\$410
1987	19,330	\$6,147,705	\$318	0.810	\$393
1988	20,216	\$5,907,408	\$292	0.843	\$347
1989	21,706	\$6,490,000	\$299	0.884	\$338
1990	20,384	\$6,197,000	\$304	0.932	\$326
1991	19,474	\$5,979,000	\$307	0.971	\$316
1992	21,056	\$6,591,000	\$313	1.000	\$313
1993	23,005	\$7,316,000	\$318	1.030	\$309
1994*	24,820	\$7,272,000	\$293	1.061	\$276

* Estimated

Source: Electronic Industries Association, Economic Report of the President

APPENDIX B

MARKET SHARES AND EFFECTIVE COMPETITION: A REAL-WORLD EXAMPLE

The landscape of multichannel video in Mexico City has experienced significant changes in the last few years, as a vigorous new MMDS competitor turned the world upside down for a complacent cable operator. This case study summarizes the effects of MMDS competition on cable rates. The facts for this report are drawn chiefly from a report prepared by the Federal Competition Commission, which is responsible for enforcing Mexico's new antitrust law.

The various technologies for delivering video services in Mexico are exactly the same as in the U.S. The chief difference between U.S. and Mexican television is that until recently Mexican commercial broadcast television was operated as a multichannel monopoly. But for purposes of illustrating the effects of MMDS competition on cable rates, there are no material differences between the two countries.

From 1980-89, the multichannel video market in Mexico City was dominated by Cablevisión. Cablevisión is the cable TV subsidiary of Televisa, which until a few years ago was the only private television broadcaster in the country, and which also dominated TV program production. Except for a few C-band satellite dishes, Cablevisión faced no multichannel competition.

The competitive environment changed in September 1989, when Multivisión, a MMDS operator, entered the market. Since then, Cablevisión and Multivisión have been aggressively competing to increase their shares of this expanding and lucrative business. The benefits to consumers that have resulted from this new level of competition include a substantial increase in the number of subscriptions, an improvement in the quality of service, more channels, more diversified programming, pay-per-view offerings and, above all, lower prices.

Multivisión is owned by businessman Joaquín Vargas and is part of a consortium that includes Telerey (a video production company), 43 restaurants, 20 FM radio stations and 14 video and audio equipment stores, with revenues of \$300m a year. Initially, Multivisión launched an 8-channel service and had significant underutilized capacity. In 1991, it started offering more channels and pay-per-view by

phone, which had an important impact on subscribership. Multivisión now has about the same number of channels as Cablevisión and is regarded as having better programming than its competitor, with such services as the Spanish-language versions of CNN, ESPN and TNT. In addition, seven channels are devoted to pay-per-view services. No over-the-air broadcast services are carried by Multivisión. Newspaper ads giving the current channel line-ups for both services are attached.

From 1980 to 1988, the number of cable subscribers in the ZMCM area (Mexico City Metropolitan Area, which includes Mexico City and environs) increased at an average annual rate of well *under* one-half of one percent per year. In contrast, from the time of Multivisión's entry in 1989 to 1994, the market grew dramatically, at an annual rate of nearly 50 percent. This compares to growth rates of 2.8 percent for the country's GDP and of 5.6 percent for the communications and transportation sector. The number of households with cable or MMDS went up from 90,500 in 1989 to 651,000 in July 1994.

Multichannel Video Penetration

Year	TV households (000)	Cable/MMDS households (000)
1989	2,579.1	90.5
1990	2,630.7	126.5
1991	2,686.1	192.2
1992	2,742.7	311.5
1993	2,800.5	448.0
1994	2,862.4	651.0

C-band antennas, which account for less than 4.5 percent of the market in the ZMCM, are excluded.

Source: Comisión Federal de Competencia [Competition Commission, Government of Mexico]

Cablevisión was regulated by the Communications and Transportation Secretariat, which was responsible for approving rate increases. However, Televisa's close ties to the ruling PRI party may have played a role in this process. On balance, it seems likely that the rates charged by Cablevisión were not constrained by regulation.

In 1992, Multivisión started giving customers the opportunity to lease equipment used to receive and decode the MMDS signals, which allowed the company to drastically reduce its installation charges.

With the presence of a competitor in the market, Cablevisión had to modify its price-setting strategy. Cablevisión adopted different pricing policies (lowering prices, offering specials and establishing payment plans). Cablevisión also had to change its strategy regarding capacity and reach. In the past, the company offered its services only to those living in high-income areas. However, in order to compete with Multivisión, Cablevisión had to expand its network with additional construction. In other words, the two competitors did not simply fight over a small number of wealthy subscribers; they vigorously pursued potential subscribers with lesser means. On the other hand, Multivisión's subscribers are not drawn merely from areas not yet passed by cable. Multivisión took subscribers away from Cablevisión, and a few subscribers have both services.

CABLEVISION'S RATES
(1993 new pesos)

Year	Installation	Monthly Rate
1988	307.25	93.83
1989	256.03	78.19
1990	230.92	67.91
1991	188.26	55.36
1992	162.98	47.93
1993	148.50	50.00
1994	139.99	60.33

Source: Comisión Federal de Competencia

As a consequence of the increasing competition in the industry, Cablevisión has seen its share of the ZMCM market decrease from 98 percent in 1989 to 34 percent in 1994, while Multivisión's market share has increased from 2 percent in 1989 to 64 percent.

NUMBER OF HOUSEHOLDS WITH CABLE/MMDS

Year	Cablevisión		Multivisión	
	Households	Share (%)	Households	Share (%)
1989	88,400	98	2,089	2
1990	100,400	79	26,083	21
1991	118,400	62	73,775	38
1992	146,000	47	165,456	53
1993	188,000	42	260,049	58
1994	233,000	34	418,003	64

Source: Comisión Federal de Competencia

The entry of Multivisión in the market led to expansion in output, more competitive pricing policies and, ultimately, huge shifts in the market shares of the two companies involved. It is important to notice that, even though the two companies use different technologies to reach households (cable and MMDS), they are very much in direct competition with each other. Perhaps most significantly, this case study indicates that MMDS services can expand extremely rapidly, particularly where they face cable competition that has not been responsive to consumer needs.

APPENDIX C

Table 1

Current Cable Industry Statistics

U.S. Television Households	95,360,730
Basic Cable Subscribers	62,033,240
Homes Passed by Cable	91,750,000
Basic Cable/TV Households	65.1%
Homes Passed/TV Households	96.48%*

* Based on Kagan's estimate of Television Household

Source: U.S. Television Households and Basic Cable Subscribers, A. C. Nielsen, May 1995 estimates; Homes Passed: Paul Kagan Associates estimate.

Tables 2 & 3

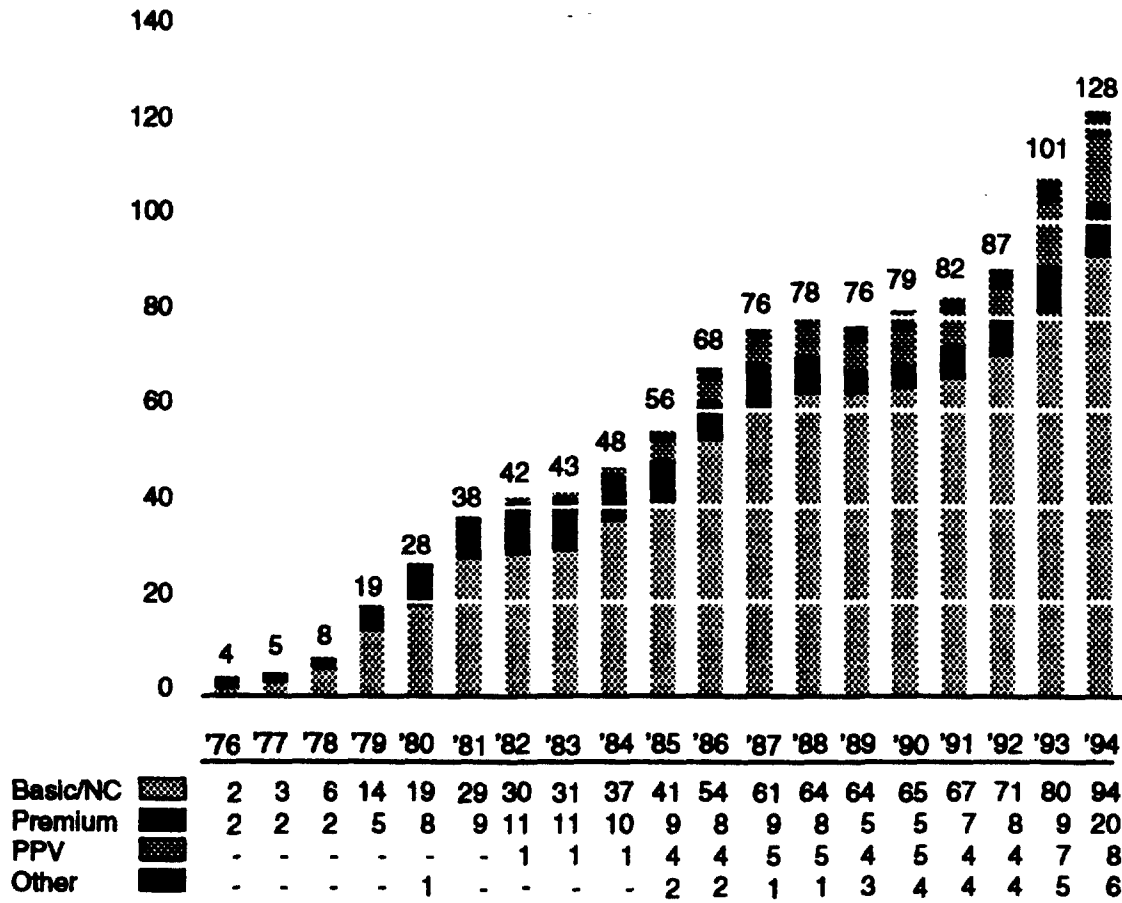
SYSTEMS AND SUBSCRIBERS BY SYSTEM CHANNEL CAPACITY

Channel Capacity	Systems	Percent of Total Systems	Basic Subscribers	Percent of Total Basic Subscribers
54 or More	1,435	12.79	23,022,509	40.840
30-53	6,376	56.85	30,754,758	54.556
20-29	1,167	10.40	1,366,780	2.424
13-19	356	3.17	108,663	0.193
6-12	653	5.82	242,684	0.431
5	13	0.12	1,876	0.003
Less Than 5	4	0.04	517	0.001
Not Available	1,212	10.81	874,761	1.552
TOTAL	11,216	100.00	56,372,548	100.000

Source: Warren Publishing, Inc., *Television & Cable Factbook*, Services Volume No. 63, 1995, p. 1-77. Data as of October 1, 1994. Percents adjusted to equal 100. Reprinted with permission.

Table 4

NATIONAL CABLE VIDEO NETWORKS BY TYPE OF SERVICE: 1976-1994



As of year-end. Revised figures reflect new entries in the "Directory of Cable Networks." (Superstations included.)

Types of Service – Basic/NC: Basic or No Charge; Premium: Includes Pay or Mini-Pay; PPV: Pay-Per-View; Other: Networks that fall under more than one service category. See p. 25 for more detailed descriptions of service types.

Source: NCTA directories of cable networks.